

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,837	03/29/2004	Atsushi Yagishita	04329.2343-02	9973
22852 7:	590 02/10/2006		EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER			MENZ, DOUGLAS M	
LLP 901 NEW YOR	RK AVENUE, NW		ART UNIT	PAPER NUMBER
	N, DC 20001-4413		2891	
			DATE MAILED: 02/10/2000	6

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·			r
•	Application No.	Applicant(s)	
	10/810,837	YAGISHITA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Douglas M. Menz	2891	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period way a failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDON	DN. timely filed  om the mailing date of this communication  NED (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on 15 Dec 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, p		<b>S</b>
Disposition of Claims	•		
4) Claim(s) 11-14 is/are pending in the application 4a) Of the above claim(s) 14 is/are withdrawn fr 5) Claim(s) is/are allowed. 6) Claim(s) 11-13 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers  9) The specification is objected to by the Examine	rom consideration. r election requirement.		
10) ☐ The drawing(s) filed on 29 March 2004 is/are: a Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correcti 11) ☐ The oath or declaration is objected to by the Ex	drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d	d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applica ity documents have been received in Rule 17.2(a)).	tion No ved in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/29/04.	4)  Interview Summar Paper No(s)/Mail I 5)  Notice of Informal 6)  Other:		

### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election without traverse of Species I, claims 11-13, in the reply filed on 12/15/05 is acknowledged.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 11-13 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art (APA).

Regarding claim 11, APA discloses a semiconductor device in which a gate electrode (3506) of a MISFET formed on a semiconductor substrate (3501) is electrically connected to a well region (3503) under a channel of said MISFET (Prior Art Figs. 26A-B and page 2 of the specification),

wherein said MISFET is formed on part of a side surface of an island-shaped element region formed on said semiconductor substrate (Prior Art Figs. 26A-B and page 2 of the specification), and electrical connection between said gate electrode of said MISFET and the well region in said semiconductor substrate is done on an upper

Art Unit: 2891

surface of the island-shaped element are electrically connected (Prior Art Figs. 26A-B and page 2 of the specification).

Regarding claim 12, APA further discloses two gate electrodes formed on opposite side of the island-shaped element region (Prior Art Figs. 26A-B and page 2 of the specification, note that gate electrode 3506 is in electrical contact with well region 3503 via 3508 in conjunction with 3507, therefore, the gate electrode structure comprises three gate electrodes as follows: 3506 on top and 3508/3507 on opposite sides of the island shaped element, Prior Art Figs. 26A-B).

Regarding claim 13, APA further discloses a source and drain (3504) formed to sandwich said each gate electrodes formed on said opposite sides of the island-shaped element (Prior Art Fig. 26A and page 2 of the specification).

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent 6365465 discloses a relevant MOSFET structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas M. Menz whose telephone number is 571-272-1877. The examiner can normally be reached on M-F 8-5.

Art Unit: 2891

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DM